

A  
8

C  
2

D  
2

## Mathematics - Beach Bench Creation

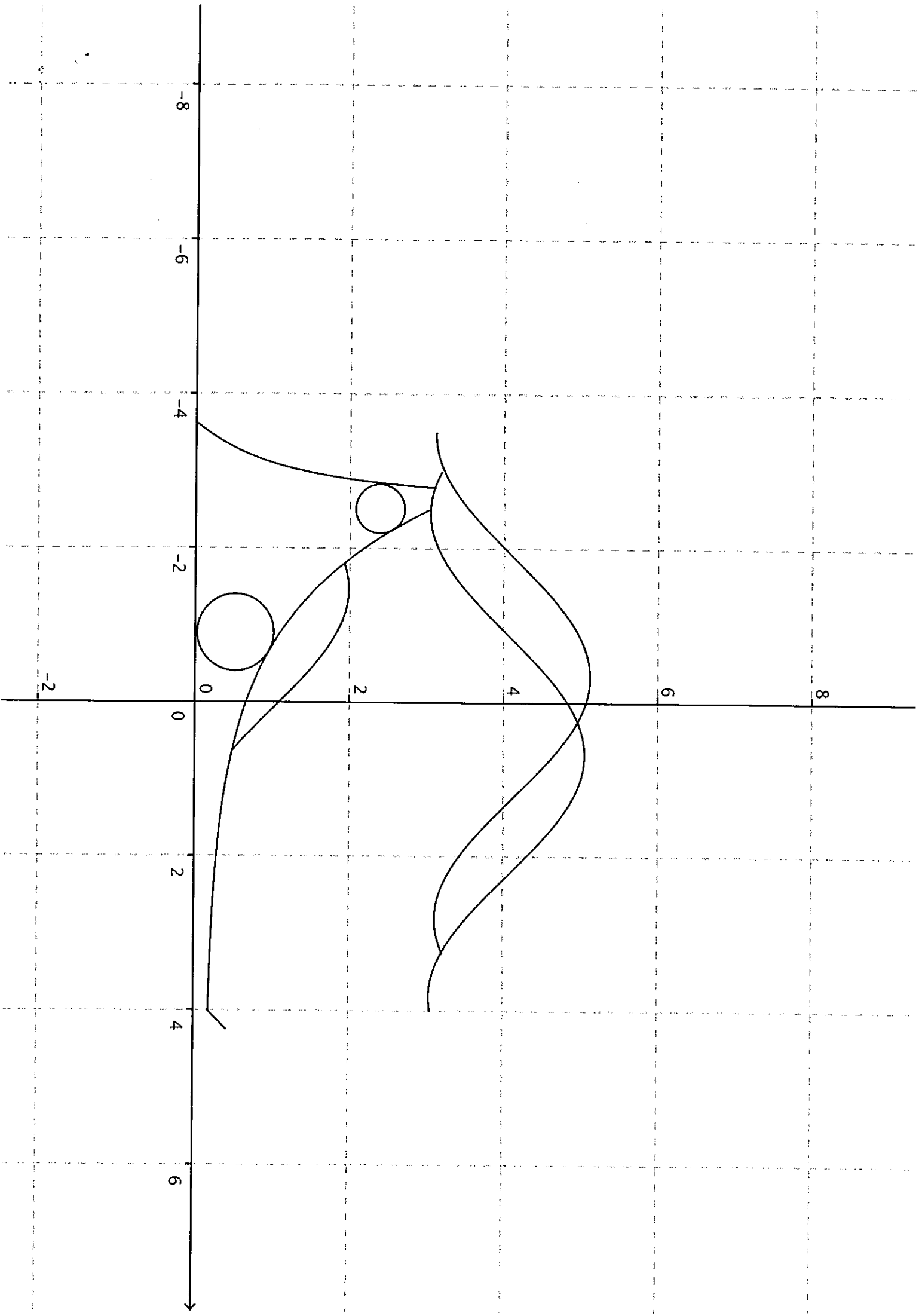
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Homeroom: Y10H

Maths Teacher: Mr. Millard

Homeroom teacher: Mr. Otto







## Mathematics - Beach Bench Creation

In this project we are going to create a beach bench, this project lets us use the software called GeoGeBra which is a software that is used to draw graphs, but in this project we are going to use the GeoGeBra software to draw a Beach Bench out, for my design, there will be 2 stacked roof, which makes it look 3d from the sides but also it could let rain drops separated to the sides so that it wouldn't go under the roof.

A: stretch up, vertical stretch

K: Move up Vertical

H: Move left(positive number) or right(Negative number)

I had used this formula  $y=a(x-h)^2-k$  to actually help myself in some of the equation in the chair.

There are a lot of manufacturing areas in the south east Asia and China, because they are quite of a lot of cheap prices for the materials and there are a lot of factory workers, which would be very good for produce products, and because of that many companies go to those places for producing their products and other things.

My beach bench / beach chair would be having more curves and it would be much more simple, but also looks casual and relax, the designs would be using wood, because wood gives people a classic feeling and with the sand color mixture, it would give people a feeling for smooth, quiet and relax feel.

My chair has 2 balls, which supports the chair from leaning over or break down and fall, there is a supporter metal stick which is hard enough which won't be broken easily to support the whole chair from leaning backwards, from looking at the graph, my chair is approximately 2 meters long and 1.5 meters high.

The shape of my chair is actually like, your leaning or maybe even lying down on a bed, its curved but its low, so actually you are mostly lying down on a curved chair, the chair has a hand supporter which supports your hand, this handler gives you a good feeling, because the angle and shape of it fits your arms and hands when you are lying down.

My first design was actually an egg chair, but when I have noticed, its impossible to design it on GeoGeBra, so I left it alone and started a new one, I started one that actually looks like a chair that's made of mostly wood and some rive color cloth on the roof, this chair



is designed by me, the theme of this chair is actually relax, and calm, i wanted to give a feeling of relax when people sat on this chair, with the smooth quite waves from the ocean looking out through the sunset, i really wanted to give a feeling that really makes your wanted to just calm your self down onto the chair, and just quietly sleeps through the sunset on the chair.

I have seen a lot of other sites where people posts there own designs for beach chairs and benches, but what i have found is i never seen one that have curve and without and solid angle on the leaning part, which i have designed one that have no one solid angle but just simply a curve, to just actually let the end user to just carefully and calm down his / her whole body and just lye down and relax.

All of the cloth and wool would be in rice color and for the wood, i prefer using some brighter color wood or maybe dark wood, which gives a feeling for classical, if i could put something that could connect with the chair i would choose to put a music player, which have mostly classical music and some smooth quite songs.

For the price of the chair, i would put it as \$300 - \$500 because i had calculated, for the wood, it might just cost \$50 - \$100 and the other scrap and pieces are around \$100 and for the cost of the workers are the left over money, this maybe worst it, because this is maybe the lowest price i could calculated briefly out of my head.





## Reflection :

Through this project i learnt a lot in the software and also how does each equation changes the view of the chair, using the graph we could draw a lot of many things, but also if i have more time on this project i would have learnt more about the advanced than just the basics, i actually learnt mostly from my classmates and friends, because in class we don't have much time learning this software, we just have to learn it by our selfs, but somehow, this is a very nice software, i could actually do anything with this related to graph.

In this project what i loved the most is actually designing the chair, because what i loved to do the most is architecture and interior design, designing furniture is also one of my favorite things to do when I'm bored, but in this project i can't actually use all my knowledge and ability from the experience i got to do all these things.

This project really made me learnt a lot of things, i understands that why our teacher, Mr. Millard always shouts at us and reminding us all the time about the assessment and the graphs, because he really cares about how are we doing in maths, he is a very good teacher, i would respect him and do my best in maths, i would also learn harder and try new things, take challenges and finish home / class-works on time, i won't wanted to lose a great chance in learning since i got a very good teacher.



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I have just seen most of all of the designs and the cost of it, to design my own beach chair.

